

# Work Order ID 111058

\*111058\*

Page 1

January-08-14 12:53:01 PM

Item ID: D350-689-013

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Stop

\*NS2\*

Item Name: Floor Provisions

Start Date: 1/08/14

Start Qty: 2.00

\*2\*

Cust Item ID:

Required Date: 1/08/14

Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: 14-01-10

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

\*NR1\*

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

DSI9588

B

IIN D350-689

B

100

0.00

\*100\*

DOCUMENT CONTROL

DC

Memo M. 10

0.00

Document Control

Photocopy D350-689 bluefile & type labels per PPP D350-689-013 CHG 005

MAY 20 2014

06  
9-89

2

MAY 21 2014

MLJ 1404-25

2

101

Pick Kit

0.00

\*101\*

Packaging

Memo

0.00

Packaging

DAS  
28  
9-89

2x

APR 25 2014

DAS  
31  
9-89

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence  <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Work Order ID 111058****\*111058\***

Page 2

January-08-14 12:53:01 PM

Item ID: D350-689-013

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Floor Provisions

Start Date: 1/08/14

Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 1/08/14

Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start

**\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

110

QC4- 100% Inspect kits for completeness

0.00

**\*110\***DAS  
06  
9-89

MAY 20 2014

QC

Memo

0.00

Quality Control

120

Packaging

0.00

**\*120\***

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D350-689-013

Location: 6-4

PPP Rev: \_\_\_\_\_

2 MAY 21 2014

DAS  
06  
9-89

130

QC21- Final Inspection - Work Order Release

0.00

**\*130\***

QC

Memo

0.00

Quality Control

MLJ 140521

MLJ 140521

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

# Picklist Print

January-08-14 12:52:59 PM

Page 1

Work Order ID: 111058  
Parent Item: D350-689-013  
Parent Item Name: Floor Provisions

Start Date: 1/08/14  
Start Qty: 2.00

Required Date: 1/08/14  
Required Qty: 2.00

Comments: IPP rev D 06.02.07 Re-format ec  
IPP rev E 06.02.28 Fixed typo ec  
IPP rev F 07.01.02 per dsi 9311 ec  
D3033-1 DD verf:EC IPP REV;H 11.11.17 PER IIN REV B DD VERF;EC IPP  
REV:I 11.11.24 AS PER ECN11-674 DD VERF:EC IPP REV:J 12.11.20 AS PER DSI9588  
REV:B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4575-3 Doubler DAS 06 9-89		Manufactured	No			110	Each	18.0000	1	2	DAS 28 9-89	APR 28 2014	
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				ST176		18							
				102798		12		2X					
				107967		2							
				108754		4							
D3025-1 Beam DAS 06 9-89		Manufactured	No			110	Each	4.0000	1	2	DAS 28 9-89		
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				ST177		4		1X B116910					
				108003		4		2X					
D4575-1 Beam DAS 06 9-89		Manufactured	No			110	Each	6.0000	1	2	DAS 28 9-89		
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				ST176		6		115171					
				108117		2							
				108900		4							
D3027-1 Clip DAS 06 9-89		Manufactured	No			110	Each	7.0000	1	2	DAS 28 9-89		
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				ST023		7							
				96360		7		2X					

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

# Picklist Print

January-08-14 12:52:59 PM

Page 2

Work Order ID: 111058  
Parent Item: D350-689-013  
Parent Item Name: Floor Provisions

Start Date: 1/08/14

Required Date: 1/08/14

Start Qty: 2.00

Required Qty: 2.00

<b>D3027-3</b> Clip DAS 06 9-89	Manufactured	No		110	Each	7.0000	1	2	DAS 28 9-89	APR 28 2014	
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						DAS 31 9-89
			ST023	7							
			103088	7				2x			
<b>D3027-5</b> Clip DAS 06 9-89	Manufactured	No		110	Each	7.0000	1	2	DAS 28 9-89		
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						DAS 31 9-89
			ST023	7							
			102841	7				2x			
<b>D3027-7</b> Clip DAS 06 9-89	Manufactured	No		110	Each	13.0000	1	8	DAS 28 9-89		
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						DAS 31 9-89
			ST023	13							
			106800	13							
<b>D3032-1</b> Spacer DAS 06 9-89	Manufactured	No		110	Each	7.0000	1	2	DAS 28 9-89		
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						DAS 31 9-89
			ST177	7							
			96165	7				2x			
<b>D3033-1</b> Seat Track DAS 06 9-89	Manufactured	No		110	Each	0.0000	1	4	DAS 28 9-89		
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						DAS 31 9-89
			ST177	4							
			102838	4							
<b>D3234-1</b> Doubler DAS 06 9-89	Manufactured	No		110	Each	4.0000	1	2	DAS 28 9-89		
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						DAS 31 9-89
			ST177	4							
			102838	4							
<b>D3234-5</b> Spacer DAS 06 9-89	Manufactured	No		110	Each	14.0000	1	4	DAS 28 9-89		
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						DAS 31 9-89
			ST033	14							
			102907	14				4x			

January-08-14 12:53:00 PM

Shop Packet Print

Page 2

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



# Picklist Print

January-08-14 12:53:00 PM

Page 3

Work Order ID: 111058  
Parent Item: D350-689-013  
Parent Item Name: Floor Provisions

Start Date: 1/08/14  
Start Qty: 2.00

Required Date: 1/08/14  
Required Qty: 2.00

MS21059113

Nut Plate  
DAS  
06  
9-89

Purchased No

110 Each 188.0000

12

24

DAS

APR 25 2014

## Location

## Loc Qty

## Loc Code

ST316

188

M127743

188

~~128635~~ 128936 X12

MS24693-S273

Screw

Purchased No

110 Each 575.0000

2

4

DAS

## Location

## Loc Qty

## Loc Code

Mezz

575

100151

475

117291

100

4X

DAS  
06  
9-89

MS27039-1-10

SCREW

Purchased No

110 Each 259.0000

6

12

DAS

## Location

## Loc Qty

## Loc Code

GA

100

120449

100

ST506

159

m126474

159

127993

DAS  
06  
9-89

NAS1149D0332J

Washer

Purchased No

110 Each 2,018.0000

6

12

DAS

## Location

## Loc Qty

## Loc Code

ST293

618

m127431

618

ST294

10

m125807

10

ST510a

1390

m127374

390

m127389

1000

128606

DAS  
06  
9-89

January-08-14 12:53:00 PM

Shop Packet Print

Page 3

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

# DART SERVICE INSTRUCTION

## TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. B AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV. 1

REF. TCCA STC: SH02-33  
REF. FAA STC: SR01620NY  
REF. EASA STC: EASA.IM.R.S.01453  
REF. TCA STC: 2005S03-09

### 1.0 PURPOSE

For D350-689-011/-013 at CHG 006/005 and later and D350-689-021/-023 Kits at CHG 005/004 and later, the D3026-1 Channel has been replaced with the D4575-1 Beam and D4575-3 Doubler and the D3234-3 Doubler has been removed. Consequently, the installation instructions for D350-689-011/-013 at CHG 006/005 and D350-689-021/-023 at CHG 005/004 are updated per Section 2.0 of this Service Instruction. The parts list update is shown in Section 4.0 of this Service Instruction. There is a negligible change to the weight and balance.

### 2.0 INSTALLATION CHANGES FOR D350-689-013

Section 3.9, *INSTALLATION OF D350-689-013 FLOOR PROVISIONS KIT* (pages 4 and 5 of IIN-D350-689), is changed as follows:

#### Item 3.3.15 is:

If there is an existing stringer at LBL 27.33, it will need to be removed from that location. Locate D4575-1 Beam, D4575-3 Doubler, and D3032-1 Spacer as shown in Figure 1 of this Service Instruction. Transfer drill existing holes from the aircraft floor to the D4575-1 Beam, D4575-3 Doubler, and D3032-1 Spacer. Ensure 1.0" to 1.5" rivet pitch and add additional holes if required. If there is no existing stringer, locate D4575-1 Beam, D4575-3 Doubler, and D3032-1 Spacer as shown in Figure 1 of this Service Instruction and drill Ø0.128" holes on a 1.0" to 1.5" pitch.

**Note:** Drill a Ø1.00" (Ø25.4 mm) hole in the D4575-1 Beam to clear extension tube of collective and cutout as required for clearance of collective opening and fwd bulkhead as shown in Figure 3 of this Service Instruction.

#### Item 3.3.15 was:

If there is an existing stringer at LBL 27.33, it will need to be removed from that location. Locate D3026-1 Channel as shown in Figure 4 and transfer existing holes from the aircraft floor to the D3026-1 Channel & D3032-1 Spacer. Ensure 1.0" to 1.5" rivet pitch and add additional holes if required. If there is no existing stringer, locate D3026-1 Channel & D3032-1 Spacer as shown in Figure 4 and drill Ø0.128" holes on a 1.0" to 1.5" pitch.

#### Item 3.3.17 is:

Counter sink holes in the D3032-1 Spacer for MS20426AD4 rivets. Install D4575-1 Beam, D4575-3 Doubler, and D3032-1 Spacer to floor using MS20426AD4 rivets.

#### Item 3.3.17 was:

Counter sink holes in the D3032-1 Spacer for MS20426AD4 rivets. Install D3026-1 Channel and D3032-1 Spacer using MS20426AD4 rivets.

#### Item 3.3.22 is:

Rivet D3234-1 Doubler to D3025-1 Beam as shown in Figure 7 using MS20470AD4 rivets. Continue at step 3.3.25.

#### Item 3.3.22 was:

Rivet D3234-1 Doubler to D3025-1 Beam and D3234-3 Doubler to D3026-1 Channel as shown in Figure 7 using MS20470AD4 rivets. Continue at step 3.2.25.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *D. Shepherd*  
D. SHEPHERD (DE # 02)

DATE: 12.11.09  
CERT. NO.: SH02-33  
ISSUE NO.: 1

B	CHANGES TO -013 KIT INSTALLATION. REF: CIR12-12.	MB	12.11.09
A	NEW ISSUE	MB	11.12.22
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>13</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>	DRAWING NO.	REV. B
CHECKED	<i>[Signature]</i>	DSI 9588	SHEET 1 OF 6
MFG. APPR.	N/A	TITLE	SCALE
APPROVED	<i>[Signature]</i>	INSTALLATION CHANGE	NTS
DE APPR.	<i>[Signature]</i>	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	12.11.09		

111058  
ML5  
14-01-10

### 3.0 INSTALLATION CHANGES FOR D350-689-023

Section 3.9, *INSTALLATION OF D350-689-023 ENERGY ATTENUATING FLOOR PROVISIONS KIT* (pages 8 and 9 of IIN-D350-689), is changed as follows:

**Item 3.9.8 is:**

If there is an existing stringer at LBL 27.33, it will need to be removed from that location. Locate D4575-1 Beam and D4575-3 Doubler as shown in Figure 2 of this Service Instruction. Transfer drill existing holes from the aircraft floor to the D4575-1 Beam and D4575-3 Doubler. Ensure 1.0" to 1.5" rivet pitch and add additional holes if required. If there is no existing stringer, locate D4575-1 Beam and D4575-3 Doubler as shown in Figure 1 of this Service Instruction and drill Ø0.128" holes on a 1.0" to 1.5" pitch.

**Note:** Drill a Ø1.00" (Ø25.4 mm) hole in the D4575-1 Beam to clear extension tube of collective and cutout as required for clearance of collective opening and fwd bulkhead as shown in Figure 3 of this Service Instruction.

**Item 3.9.8 was:**

If there is an existing stringer at LBL 27.33, it will need to be removed from that location. Locate D3026-1 Channel as shown in Figure 4 and transfer existing holes from the aircraft floor to the D3026-1 Channel. Ensure 1.0" to 1.5" rivet pitch and add additional holes if required. If there is no existing stringer, locate D3026-1 Channel as shown in Figure 4 and drill Ø0.128" holes on a 1.0" to 1.5" pitch.

**Item 3.9.10 is:**

Attach D4575-1 Beam and D4575-3 Doubler to floor using qty (14) MS20426AD4 rivets.

**Item 3.9.10 was:**

Attach D4575-1 Channel to floor using qty (14) MS20426AD4 rivets.

**Item 3.9.12 is no longer applicable:**

~~Rivet D3234-3 Doubler to D3026-1 Channel as shown in Figure 7 using MS20470AD4 rivets.~~

**Item 3.9.12 was:**

Rivet D3234-3 Doubler to D3026-1 Channel as shown in Figure 7 using MS20470AD4 rivets.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

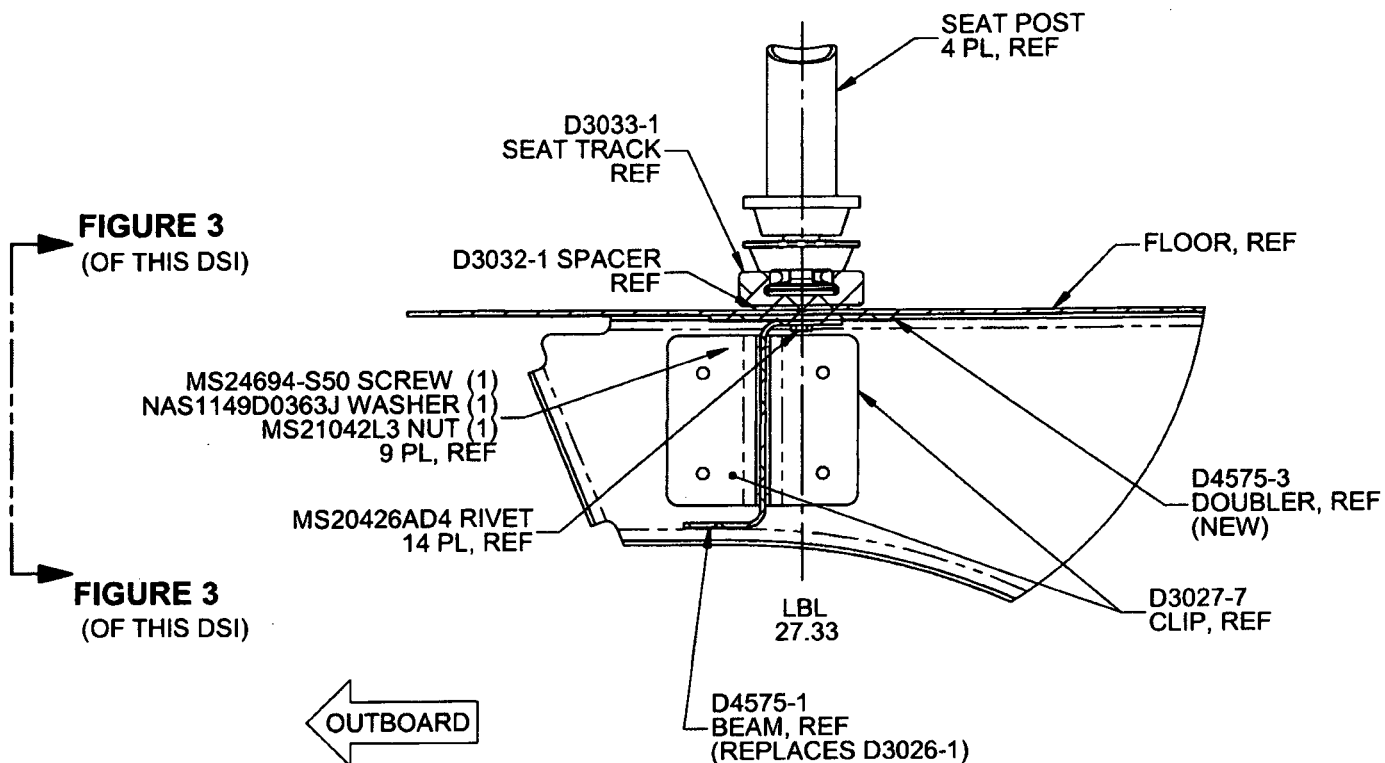
APPROVED

BY:

D. SHEPHERD (DE # 02)

DATE: 12.11.09  
CERT. NO.: SH02-33  
ISSUE NO.: 1

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9588	SHEET 2 OF 6
APPROVED		TITLE	SCALE
DE APPR.		INSTALLATION CHANGE	NTS
DATE	12.11.09	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



**CROSS SECTION VIEW F-F/M-M: From Figures 5 and 7 (IIN-D350-689)**  
**CROSS SECTION VIEW F-F/M-M: From Figures 25-5 and 25-7 (ICA-D350-689)**

**FIGURE 1: UPDATES TO CROSS SECTIONS F-F AND M-M**

With reference to Figures 5 and 7 of IIN-D350-689  
 (Figures 25-5 and 25-7 of ICA-D350-689)

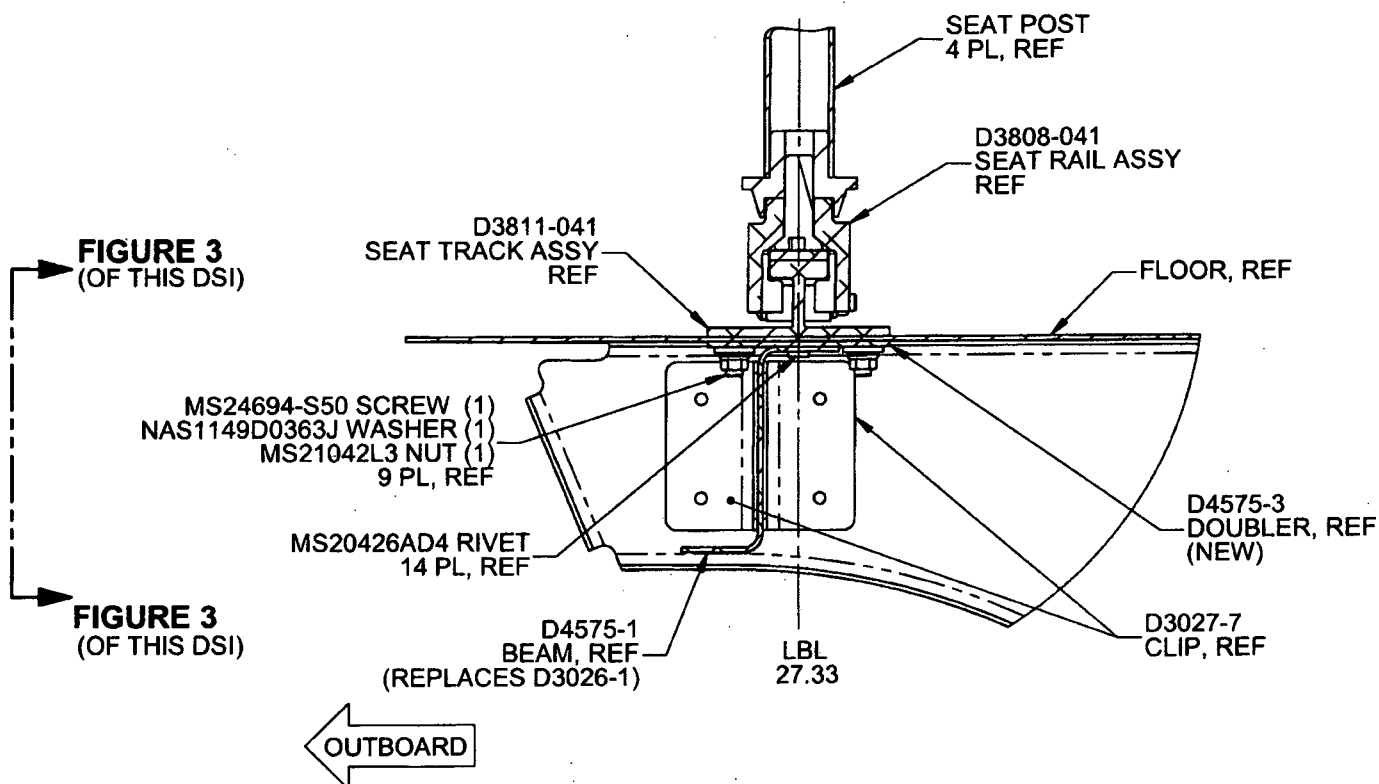
CANADA  
 DEPARTMENT OF TRANSPORT  
 AIRCRAFT CERTIFICATION  
 BRANCH  
 DAO # 01-O-01

APPROVED

BY: *[Signature]*  
 D. SHEPHERD (DE # 02)

DATE: 12.11.09  
 CERT. NO.: SH02-33  
 ISSUE NO.: 1

DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE LTD</b>	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9588	SHEET 3 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALLATION CHANGE	NTS
DATE	12.11.09	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



**FIGURE 21: Cross Section View T-T from Figure 19 (IIN-D350-689)**  
**FIGURE 25-21: Cross Section View T-T from Figure 25-19 (ICA-D350-689)**

**FIGURE 2: UPDATES TO FIGURE 21 (IIN-D350-689) AND 25-21 (ICA-D350-689)**

With reference to Figures 19 and 20 of IIN-D350-689  
 (Figures 25-19 and 25-20 of ICA-D350-689)

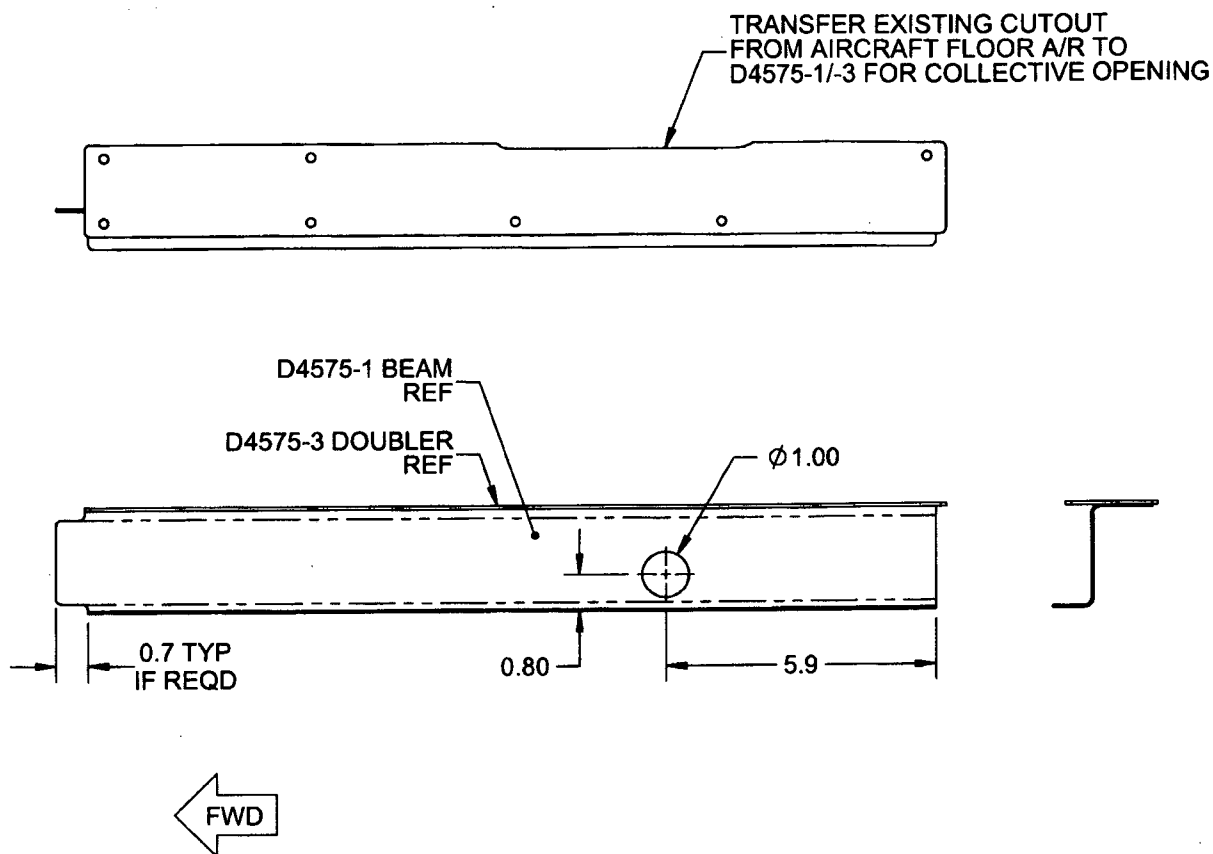
CANADA  
 DEPARTMENT OF TRANSPORT  
 AIRCRAFT CERTIFICATION  
 BRANCH  
 DAO # 01-O-01

APPROVED

BY: *D. Shepherd*  
 D. SHEPHERD (DE # 02)

DATE: 12.11.09  
 CERT. NO.: SH02-33  
 ISSUE NO.: 1

DESIGN	<i>B</i>	<b>DART AEROSPACE LTD</b>	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9588	SHEET 4 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALLATION CHANGE	NTS
DATE	12.11.09	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



**FIGURE 3: RELIEFS ON D4575-1/-3**  
(ONLY D4575-1/-3 SHOWN FOR CLARITY)  
VIEW LOOKING INBOARD

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED  
BY: *D. Shepherd*  
D. SHEPHERD (DE # 02)

DATE: 12.11.09  
CERT. NO.: SH02-33  
ISSUE NO.: 1

DESIGN	<del>3</del>	<b>DART AEROSPACE LTD</b>	
DRAWN	<del>3</del>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<del>3</del>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9588	SHEET 5 OF 6
APPROVED	<del>3</del>	TITLE	SCALE
DE APPR.	<del>3</del>	INSTALLATION CHANGE	NTS
DATE	12.11.09	COPYRIGHT © 2011 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

#### 4.0 PARTS LIST CHANGE

The parts list of D350-689-021/-023 at CHG 005/004 or later is amended as follows:

#### 5. PARTS LIST (IIN-D350-689) 25.10 PARTS LIST (ICA-D350-689)

IS:

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
X									D350-689-011	DUAL HIGH BACK SEAT INSTALLATION, LH
1	X								D350-689-013	FLOOR PROVISIONS KIT
		X							D350-689-015	SEAT MODIFICATION KIT
			X						D350-689-017	SHOULDER HARNESS KIT
				X					D350-689-019	CONTROL GUARD KIT
					X				D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
					1	X			D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
1							X		D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
					1			X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
									D3026-1	CHANNEL (REMOVED)
									D3234-3	DOUBLER (REMOVED)
	1					1			D4575-1	BEAM (REPLACES D3026-1)
	1					1			D4575-3	DOUBLER (NEW)

WAS:

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
X									D350-689-011	DUAL HIGH BACK SEAT INSTALLATION, LH
1	X								D350-689-013	FLOOR PROVISIONS KIT
		X							D350-689-015	SEAT MODIFICATION KIT
			X						D350-689-017	SHOULDER HARNESS KIT
				X					D350-689-019	CONTROL GUARD KIT
					X				D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
					1	X			D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
1							X		D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
					1			X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
	1					1			D3026-1	CHANNEL
	1					1			D3234-3	DOUBLER

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *D. Shepherd*  
D. SHEPHERD (DE #02)

DATE: 12.11.09  
CERT. NO.: SH02-33  
ISSUE NO.: 1

DESIGN	<i>B</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA
DRAWN	<i>B</i>	
CHECKED	<i>H</i>	DRAWING NO. <b>DSI 9588</b>
MFG. APPR.	N/A	REV. B SHEET 6 OF 6
APPROVED	<i>H</i>	TITLE <b>INSTALLATION CHANGE</b>
DE APPR.	<i>H</i>	SCALE NTS
DATE	<b>12.11.09</b>	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



MAY 20 2014

DART AEROSPACE LTD.

REFERENCE ONLY

DAS

06

9-89

IIN-D350-689



Page 24 of 25

**4. WEIGHT AND BALANCE**

The following weight and balance information is for the Dart Dual High Back Seat Installation. The weight and balance of the parts that are removed from the aircraft to perform this installation are the responsibility of the installer.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-689-011 Dual High Back Seat Installation, Fwd Position	27.6 lb 12.5 kg	-18.2 in -0.46 m	-502 in-lb -5.8 m-k-g	60.7 in 1.54 m	1675 in-lb 19.3 m-k-g
D350-689-013 Floor Provisions Kit, Fwd Position	2.0 lb 0.9 kg	-18.2 in -0.46 m	-36 in-lb -0.4 m-k-g	60.7 in 1.54 m	121 in-lb 1.4 m-k-g
D350-689-011 Dual High Back Seat Installation, Aft Position	28.1 lb 12.7 kg	-18.2 in -0.46 m	-511 in-lb -5.8 m-k-g	63.7 in 1.62 m	1790 in-lb 20.57 m-k-g
D350-689-013 Floor Provisions Kit, Aft Position	3.1 lb 1.4 kg	-18.2 in -0.46 m	-56 in-lb -0.6 m-k-g	62.2 in 1.58 m	193 in-lb 2.2 m-k-g
D350-689-015 Seat Modification Kit	1.0 lb 0.5 kg	-17.2 in -0.44 m	-17 in-lb -0.22 m-k-g	60.7 in 1.54 m	61 in-lb 0.77 m-k-g
D350-689-017 Shoulder Harness, Fwd Position	4.4 lb 2.00 kg	-18.2 in -0.46 m	-80.1 in-lb -0.92 m-k-g	60.7 in 1.54 m	267 in-lb 3.08 m-k-g
D350-689-017 Shoulder Harness, Aft Position	4.4 lb 2.00 kg	-18.2 in -0.46 m	-80.1 in-lb -0.92 m-k-g	64.7 in 1.64 m	285 in-lb 3.28 m-k-g
D350-689-019 Control Guard, Fwd Position	0.5 lb 0.23 kg	-9.0 in -0.23 m	-4.5 in-lb -0.05 m-k-g	60.7 in 1.54 m	30 in-lb 0.35 m-k-g
D350-689-019 Control Guard, Aft Position	0.5 lb 0.23 kg	-9.0 in -0.23 m	-4.5 in-lb -0.05 m-k-g	64.7 in 1.64 m	32 in-lb 0.38 m-k-g
D350-689-021 Dual High Seat Back Installation, LH Fwd Position	29.2 lb 13.2 kg	-18.2 in -0.46 m	-531 in-lb -6.1 m-k-g	60.7 in 1.54 m	1772 in-lb 20.3 m-k-g
D350-689-021 Dual High Seat Back Installation, LH Aft Position	29.2 lb 13.2 kg	-18.2 in -0.46 m	-531 in-lb -6.1 m-k-g	64.7 in 1.64 m	1889 in-lb 21.6 m-k-g
D350-689-023 Energy Attenuating Floor Provisions Kit	2.5 lb 1.1 kg	-18.2 in -0.46 m	-46 in-lb -0.5 m-k-g	62.2 in 1.58 m	156 in-lb 1.7 m-k-g

**5. PARTS LIST**

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
X									D350-689-011	DUAL HIGH BACK SEAT INSTALLATION, LH
1									D350-689-013	FLOOR PROVISIONS KIT
		X							D350-689-015	SEAT MODIFICATION KIT
			X						D350-689-017	SHOULDER HARNESS KIT
				X					D350-689-019	CONTROL GUARD KIT
					X				D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
					1	X			D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
1							X		D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
					1			X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
							2	2	D3016-041	SEAT FRAME ASSEMBLY
							1	1	D3017-041	BACK FRAME ASSEMBLY
1					1				D3018-1	SEAT CUSHION
1					1				D3019-1	BACK CUSHION
							1	1	D3021-041	TUBE ASSEMBLY
							1	1	D3022-1	SEAT PAN
							1	1	D3023-1	BACK PANEL
							3	3	D3024-1	SPACER
									D3025-1	BEAM

• COPYRIGHT © 2011 BY DART AEROSPACE LTD. •

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Revision: B

Date: 11.07.22

#### 4.0 PARTS LIST CHANGE

**REFERENCE ONLY**

The parts list of D350-689-021/-023 at CHG 005/004 or later is amended as follows:

#### 5. PARTS LIST (IIN-D350-689)

#### 25.10 PARTS LIST (ICA-D350-689)

IS:

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
X									D350-689-011	DUAL HIGH BACK SEAT INSTALLATION, LH
1	<del>1</del>								D350-689-013	FLOOR PROVISIONS KIT
		X							D350-689-015	SEAT MODIFICATION KIT
			X						D350-689-017	SHOULDER HARNESS KIT
				X					D350-689-019	CONTROL GUARD KIT
					X				D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
					1	X			D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
1							X		D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
					1			X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
									D3026-1	CHANNEL (REMOVED)
									D3234-3	DOUBLER (REMOVED)
						1			D4575-1	BEAM (REPLACES D3026-1)
						1			D4575-3	DOUBLER (NEW)

WAS:

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
X									D350-689-011	DUAL HIGH BACK SEAT INSTALLATION, LH
1	X								D350-689-013	FLOOR PROVISIONS KIT
		X							D350-689-015	SEAT MODIFICATION KIT
			X						D350-689-017	SHOULDER HARNESS KIT
				X					D350-689-019	CONTROL GUARD KIT
					X				D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
					1	X			D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
1							X		D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
					1			X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
	1					1			D3026-1	CHANNEL
	1					1			D3234-3	DOUBLER

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY: *D. Shepherd*  
D. SHEPHERD (DE # 02)

DATE: 12.11.09  
CERT. NO.: SH02-33  
ISSUE NO.: 1

DESIGN	<i>B</i>	<b>DART AEROSPACE LTD</b>	
DRAWN	<i>B</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>TH</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9588	SHEET 6 OF 6
APPROVED	<i>TH</i>	TITLE	SCALE
DE APPR.	<i>TH</i>	INSTALLATION CHANGE	NTS
DATE	12.11.09	COPYRIGHT © 2011 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
	1					1			D3026-1	CHANNEL
	1								D3027-1	CLIP
	1								D3027-3	CLIP
	1								D3027-6	CLIP
	4					4			D3027-7	CLIP
							4		D3028-1	STUD
		2					2		D3029-1	SPRING
		2					2		D3030-1	LOCK
							2	2	D3031-1	LOOP
									D3032-1	SPACER
	2	1							D3033-1	SEAT TRACK
		4							D3059-1	STUD
		4							D3060-1	BUSHING
		4							D3061-1	RADIUS BLOCK
				1					D3084-3	STRUT
									D3234-1	DOUBLER
	1					1			D3234-3	DOUBLER
	2								D3234-5	SPACER
								2	D3808-041	SEAT RAIL ASSEMBLY
								4	D3809-1	SLIDING BLOCK
						1			D3811-041	SEAT TRACK ASSEMBLY
			2						D4071-041	SHOULDER HARDNESS ASSY
							3	3	AN3-12A	BOLT
				1					AN4-12A	BOLT
				1					AN4-20A	BOLT
			2						AN5-4A	BOLT
							40	40	MS20600AD4W2	RIVET
							6	6	MS20600AD4W3	RIVET
						9	17	17	MS21042L3	NUT (OR MS21042-3)
				2			6	6	MS21042L4	NUT (OR MS21042-4)
		4	2						MS21042L5	NUT (OR MS21042-5)
	2	4							MS21059L3	NUTPLATE
	2	1					4	4	MS24693-S272	SCREW
									MS24693-S273	SCREW
								8	MS24694-S3	SCREW
						9			MS24694-S50	SCREW
								4	MS24694-S148	SCREW
	6	3							MS27039-1-10	SCREW
							4	4	MS27039-1-17	SCREW
							6	6	MS27039-1-19	SCREW
							6	6	MS27099-4-21	SCREW
	6	3					17	17	NAS1149D0332J	WASHER (OR AN960JD10L)
						9			NAS1149D0363J	WASHER (OR AN960JD10)
				8					NAS1149D0416J	WASHER (OR AN960JD416L)
							6	6	NAS1149D0432J	WASHER (OR AN960JD416)
			4						NAS1149D0516J	WASHER (OR AN960JD516L)
		4							NAS1149D0563J	WASHER (OR AN960JD516)
				2					NAS43DD4-46N	SPACER

• COPYRIGHT © 2011 BY DART AEROSPACE LTD. •

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Revision: B

Date: 11.07.22